

# PEAKS of Interest

## **Bruker Daltonics obtains Russian Medical Device Registration**

Bruker Daltonics Inc. (Billerica, Massachusetts) announced that it has obtained registration of its MALDI-TOF product line of microflex, autoflex TOF or TOF/TOF, and ultraflex TOF/TOF mass spectrometers as medical devices from the Ministry of Health and Social Development of the Russian Federation.

MALDI-TOF mass spectrometry is increasingly being applied as a clinical research tool in biomarker discovery, clinical proteomics, functional genomics, molecular imaging, and microorganism identification. Bruker Daltonics now has registered its flex series MALDI-TOF mass spectrometers as medical devices in the Russian Federation, to facilitate upcoming regulatory approvals of novel mass spectrometry based upon in vitro diagnostic assays by its Russian customers.

## **Eksigent appoints new CEO**

Eksigent Technologies, LLC (Dublin, California) announced that David Weber has joined the company as CEO, president, and director.

Weber joins the company from Stratagene Corporation (San Diego, California), where he was vice-president of Global Marketing and Business Development.

Weber brings 30 years experience in the life science and biotechnology industries, with sales and marketing positions at companies ranging in size from start-up to over \$300 million in annual sales.

## **PerkinElmer acquires Spectral Genomics**

PerkinElmer, Inc. (Shelton, Connecticut) announced the acquisition of Spectral Genomics, Inc. (Houston, Texas), a leading company in molecular karyotyping technology used to evaluate chromosomal abnormalities.

Spectral Genomics' array products and analysis software help pharmaceutical, biotechnology, cytogenetic, and clinical researchers identify chromosomal abnormalities related to the study of cancer and pre- and post-natal genetic disorders. The company's proprietary Array CGH

## **Chromatography Market Profile**

### **Extraction Techniques for Environmental Samples**

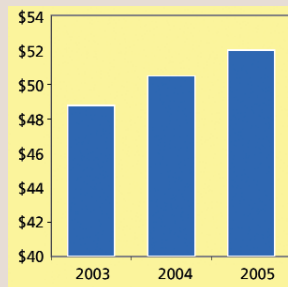
Because most samples are usually unsuitable for direct analysis, extraction is perhaps one of the most important sample preparation techniques for environmental samples. The most common types of extraction techniques include solid phase extraction (SPE), Soxhlett/liquid-liquid extraction (LLE), and advanced extraction techniques. The method used for a particular application depends on the nature of a sample.

Solid phase extraction is an important method of prechromatographic sample treatment. The versatility of SPE allows it to be used for many different purposes such as purification and concentration of trace elements in a sample, among others. SPE comes in a variety of formats including columns, cartridges, microplates, and pipette tips. LLE and Soxhlet are similar techniques and are used typically for preparing liquid matrices. LLE operates on the basis of mass transfer of a component between two immiscible liquid phases that are brought into contact with each other. In contrast to LLE, Soxhlet extraction methods are used most often when solid samples must be extracted.

While SPE and Soxhlet/LLE represent the majority of the market demand, the use of advanced extraction techniques, including accelerated or pressurized solvent extraction, microwave-assisted extraction, and supercritical fluid extraction, also have become commonplace. These systems provide faster, more efficient extraction than traditional methods. Demand for advanced extraction techniques is fueled by soil and pollution analyses.

In 2005, the North American market for extraction techniques for environmental applications accounted for about \$52 million. Although growth in North America is expected to be modest, new EPA regulations and approved methods, especially for advanced extraction techniques, provide a stimulus for continued market expansion.

The foregoing data was extracted from Strategic Directions International, Inc. Market Analysis and Perspectives (MAP) Report. For more information, contact Glenn Cudiamat, vice president of Research Services, Strategic Directions International, Inc., 6242 Westchester Parkway, Suite 100, Los Angeles, CA 90045; tel. (310) 641-4982, fax (310) 641-8851, e-mail: sdi@strategic-directions.com, or website: <http://www.strategic-directions.com>.



North America Market for Environmental Extraction Techniques

provides high-resolution global views of the human genome, enabling researchers to identify the exact location of any chromosomal deletions and amplifications that can cause an increased risk of genetic disease.

## **Thermo acquires Fisher Scientific**

Thermo Electron (Waltham, Massachusetts) announced the acquisition of Fisher Scientific International Inc. (Pittsburgh, Pennsylvania).

"The combined 'Thermo Fisher Scientific,' which sees more than \$9 billion in 2007 revenue, will have a 7500-member sales force. Meanwhile, the lab supply industry at large, worth an estimated \$20 billion to \$25 billion in annual sales, remains largely 'fragmented' with pharmaceutical and biotechnology customers demanding more one-stop shopping," said John Sullivan, an analyst with Leerink Swan & Co. ■